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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/705,228	11/12/2003	Hiroki Yamamoto	2038-304	3549

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LOWE HAUPTMAN BERNER, LLP  
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ALEXANDRIA, VA 22314

EXAMINER
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MCCLELLAND, KIMBERLY KEIL

ART UNIT	PAPER NUMBER
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1734

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/22/2006	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

10/705,228

Applicant(s)

YAMAMOTO ET AL.

Examiner

Kimberly K. McClelland

Art Unit

1734

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 November 2003 and 19 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>5/19/06</u>   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Claim Objections***

1. Claim 1 is objected to because of the following informalities: Lines 3-4 state, "at least one surface of said:". The colon appears to be unnecessary. Line 20 states, "at least one feed men". This should be changed to "at least one feed member".

Appropriate correction is required.

2. Claim 8 is objected to because of the following informalities: Line 14 contains the phrase, "an aim". This term should be changed to "an arm". Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-2, 5-9, and 12-14 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,525,173 to Blenke et al.

5. With respect to claim 1, Blenke et al. discloses a method of applying curved elastic to a moving web, including feeding at least a single continuous web (24) in a machine direction as a component member of a disposable wearing article being continuously manufactured, feeding continuous elastic members (22) toward at least one surface of said web while said continuous elastic members are oscillated in a cross

Art Unit: 1734

direction relative to said machine direction (See Figure 1), and attaching said continuous elastic members in a stretched state (column 9, lines 31-33) to said one surface in accordance with a desired layout, said process further comprising the steps of: feeding said web to a nip between a pair of press rolls (70/72) substantially being in contact with each other and adapted to rotate in said machine direction around respective axes extending parallel to each other in said cross direction; and feeding said elastic members (22) from upstream of said pair of press rolls (70/72) to the nip between said press rolls (70/72) via guide means (44) adapted to oscillate said elastic members (22) in said cross direction and attaching said elastic members (22) to said web (24) by means of an adhesive (62); wherein each of said guide means comprises: a motor (82) having a rotary shaft (47) extending in a direction crossing said axes and adapted to repeat reversal of its rotational direction (column 8, lines 50-52); an arm connected directly with said rotary shaft and extending in a direction crossing said rotary shaft (47), said arm being formed on its distal end with guide means adapted for passage (44) of said elastic members (22), and said arm being adapted to swing around said rotary shaft as said rotary shaft rotates; and at least one feed member (34) located upstream of said rotary shaft as viewed in said machine direction and adapted to direct said elastic members toward said guide means (44); and wherein, in the course of running from said feed member to said pair of press rolls via said guide means, said elastic members are attached to said web while said elastic members are oscillated in said cross direction by said arm connected directly with said rotary shaft so as to repeat reversal of its swinging direction (See Figures 1-2A; column 8, lines 50-52).

Art Unit: 1734

6. As to claim 2, Blenke et al. discloses a servomotor is used as said motor (column 8, lines 41-45).

7. As to claim 5, Blenke et al. discloses said axes of said pair of press rolls (70/ 72) extend in a horizontal direction, said rotary shaft (47) of said motor (82) extends in a vertical direction and said arm extends in said horizontal direction front said rotary shaft toward said nip between said pair of press rolls (See Figure 2A).

8. As to claim 6, Blenke et al. discloses said elastic members (22) are directed from said guide means (44) to said nip between said pair of press rolls (70/72) so that said elastic members is in coincide with a tangential line with respect to a region in which said pair of press rolls substantially contact each other (See Figure 2A).

9. As to claim 7, Blenke et al. discloses said elastic members extend from said feed member to said guide means at a deviation angle of 10° or less relative to said horizontal direction (See Figure 2A).

10. As to claim 8, Blenke et al. discloses an apparatus for applying curved elastic to a moving web, including a pair of press rolls (70/72) extending parallel to each other and substantially contacting each other, said pair of press rolls (70/72) rotating in said machine direction around respective axes extending in said cross direction so as to feed said web (24) in said machine direction, and a guide means (44) located upstream of said pair of said press rolls (70/72) as viewed in said machine direction to oscillate said elastic members (22) in said cross direction; wherein each of said guide means (44) comprises; a motor (82) having a rotary shaft (47) extending in a direction crossing said axes and adapted to repeat reversal of its rotational direction (column 8, lines 50-52); an

Art Unit: 1734

arm connected directly with said rotary shaft and extending in a direction crossing said rotary shaft, said arm being formed on its distal end with said guide means (44) adapted for passage of said elastic members (22), and said arm being adapted to swing around said rotary shaft as said rotary shaft rotates; and at least one feed member (34) located upstream of said rotary shaft (47) as viewed in said machine direction and adapted to direct said elastic members toward said guide means (44; See Figures 1-2A).

11. As to claim 9, Blenke et al. discloses a servomotor is used as said motor (column 8, lines 41-45).

12. As to claim 12, Blenke et al. discloses said axes of said pair of press rolls (70/72) extend in a horizontal direction, said rotary shaft (47) of said motor (82) extends in a vertical direction and said arm extends in said horizontal direction front said rotary shaft toward said nip between said pair of press rolls (See Figure 2A).

13. As to claim 13, Blenke et al. discloses said elastic members (22) are directed from said guide means (44) to said nip between said pair of press rolls (70/72) so that said elastic members is in coincide with a tangential line with respect to a region in which said pair of press rolls substantially contact each other (See Figure 2A).

14. As to claim 14, Blenke et al. discloses said elastic members extend from said feed member to said guide means at a deviation angle of 10° or less relative to said horizontal direction (See Figure 2A).

***Claim Rejections - 35 USC § 103***

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. Claims 3 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,525,173 to Blenke et al. as applied to claims 1-2, 5-9, and 12-14 above, and further in view of U.S. Patent No. 6,574,520 to Liu et al.

17. With respect to claim 3, Blenke et al. discloses a method of applying curved elastic to a moving web, including a servomotor (82) is used to rotate the rotary shaft (47; column 8, lines 50-52). However, Blenke et al. does not specifically disclose said servomotor is actuated by a controller containing therein a program adapted to rotate said servomotor on the basis of a running speed of at least said web in said machine direction and said layout desired for said elastic members.

18. Liu et al. discloses a method of manufacturing absorbent articles, including using servomotors actuated by a controller containing therein a program adapted to rotate said servomotor on the basis of a running speed of at least said web in said machine direction and said layout desired for said elastic members (column 15, lines 11-25). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the program taught by Liu et al. with the servomotor in the method of applying curved elastic to a moving web disclosed by Blenke et al. The motivation would have been to improve accuracy, synchronization, and flexibility of production of

Art Unit: 1734

the articles (column 15, lines 11-25). It is well settled that it is not inventive to broadly provide a mechanical or automatic means to replace a manual activity which has accomplished the same results. *In re Venner and Bowser* 120 USPQ192.

19. As to claim 10, Blenke et al. discloses an apparatus for applying curved elastic to a moving web, including a servomotor (82) is used to rotate the rotary shaft (47; column 8, lines 50-52). However, Blenke et al. does not specifically disclose said servomotor is actuated by a controller containing therein a program adapted to rotate said servomotor on the basis of a running speed of at least said web in said machine direction and said layout desired for said elastic members.

20. Liu et al. discloses an apparatus for manufacturing absorbent articles, including using servomotors actuated by a controller containing therein a program adapted to rotate said servomotor on the basis of a running speed of at least said web in said machine direction and said layout desired for said elastic members (column 15, lines 11-25). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the program taught by Liu et al. with the servomotor in the apparatus for applying curved elastic to a moving web disclosed by Blenke et al. The motivation would have been to improve accuracy, synchronization, and flexibility of production of the articles (column 15, lines 11-25). It is well settled that it is not inventive to broadly provide a mechanical or automatic means to replace a manual activity which has accomplished the same results. *In re Venner and Bowser* 120 USPQ192.



Art Unit: 1734

21. Claims 4 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,525,173 to Blenke et al. as applied to claims 1-2, 5-9, and 12-14 above, and further in view of U.S. Patent No. 6,123,882 to Uchida et al.

22. With respect to claim 4, Blenke et al. discloses a method of applying curved elastic to a moving web, including an arm being adapted to swing around the rotary shaft as the rotary shaft rotates (column 8, lines 50-52). However, Blenke et al. does not specifically disclose the materials used to make the arm.

23. Uchida et al. discloses a method of using thermoplastic, including structural members of a composite material comprising any one selected from the group consisting of carbon fiber, glass fiber, metallic fiber, synthetic fiber, semi-synthetic fiber and natural fiber and any one selected from the group consisting of thermoplastic synthetic resin and thermosetting synthetic resin (column 1, lines 12-31; column 10, lines 56-67). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Uchida's teaching of a composite material for the material composition of the swinging arm disclosed by Blenke et al. The motivation would have been to use a material with strength rigidity, a high elastic modulus during high-speed manufacturing processes (column 1, lines 12-31).

24. As to claim 11, Blenke et al. discloses an apparatus for applying curved elastic to a moving web, including an arm being adapted to swing around the rotary shaft as the rotary shaft rotates (column 8, lines 50-52). However, Blenke et al. does not specifically disclose the materials used to make the arm.

Art Unit: 1734

25. Uchida et al. discloses a thermoplastic article, including structural members of a composite material comprising any one selected from the group consisting of carbon fiber, glass fiber, metallic fiber, synthetic fiber, semi-synthetic fiber and natural fiber and any one selected from the group consisting of thermoplastic synthetic resin and thermosetting synthetic resin (column 1, lines 12-31; column 10, lines 56-67). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Uchida's teaching of a composite material for the material composition of the swinging arm disclosed by Blenke et al. The motivation would have been to use a material with strength rigidity, a high elastic modulus in a high-speed manufacturing apparatus (column 1, lines 12-31).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimberly K. McClelland whose telephone number is (571) 272-2372. The examiner can normally be reached on 8:00 a.m.-5 p.m. Mon-Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris A. Fiorilla can be reached on (571)272-1187. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1734

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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